1

Illinois Sustainable Energy Plan

Energy Efficiency Portfolio Standard

Alecia Ward Midwest Energy Efficiency Alliance April 6, 2005

² Today's Presentation

- Who is MEEA?
- How does IL energy usage/consumption compare?
- What is the Energy Efficiency Story?
- How could IL (and all stakeholders) benefit from Energy Efficiency investments?
- What kinds of programs are we talking about?
- What are we NOT talking about?
- What is essential moving forward?

3

WHO IS MEEA?

4 ■ MEEA Mission

MEEA is a collaborative network whose purpose is to advance energy efficiency in the Midwest in order to support sustainable economic development and environmental preservation.

5 Who We Are: MEEA Members

- Academic and Research Institutions
- Manufacturers and Retailers
- Utilities (IOUs, Munis and Coops)
- State and Local Governments
- Energy and Environmental Non-profits
- Energy Service Companies, Contractors and Consultants

6 Illinois MEEA Members

- Alliant Energy
- Ameren
- Commonwealth Edison
- City of Chicago
- Department of Commerce and Econ Op (DCEO)
- Energy Resources Center at UIC
- Environmental Law and Policy Center (ELPC)

- Gas Technology Institute (GTI)
- Honeywell Solutions
- Summit Blue Consulting

7 MEEA PROGRAMS

Training Programs

- Building Operator Certification Program
- Midwest Building Solutions

Residential Product Programs

- Illinois Residential Lighting Program
- Change A Light, Change the World
- ENERGY STAR Refrigerator Rebate and Recycling
- Double Your Savings Campaign ENERGY STAR Qualified Clothes Washers
- Northern Illinois Energy Project

Market Assessments

- Illinois Residential Market Assessment
- Regional Market Assessment

Sister Organizations

- Northwest Energy Efficiency Alliance (NEEA)
 - Oregon, Washington, Idaho, Montana
- Northeast Energy Efficiency Partnerships (NEEP)
 - New England and the Northeast with some Mid-Atl
- Southwest Energy Efficiency Project (SWEEP)
 - Arizona, New Mexico, Colorado, Utah
- Southeast Energy Efficiency Alliance (SEEA)
 - Florida, Georgia, Alabama, Louisiana, Carolinas

MW State with Highest Usage

- Illinois leads the pack
- Followed closely by OH & MI (other industrial states)

ILLINOIS

- 2004 Electric Consumption: 127.1 million mWh
- 2002 Nat Gas Consumption: 1,036,138 (MMcf)
- 2002 Nat Gas Costs: \$6.3 Billion2002 Dollar Drain: \$3.5 Billion
- 2006 Projected Dollar Drain: \$7 Billion

10

THE NORTHWEST STORY

- Progress Under the Act –
 Total PNW Conservation Savings
- Conservation Met Approximately 1/4 of the Regional Load Growth Between 1980 2002
- 13 Conservation Significantly Reduced Projected PNW Electricity Sales

- Cost-Effective and Achievable Potential Is Equivalent to Regional Accomplishments 1980 2001
- 15 Largest Potential by Sector & End Use
- 16 FOR MORE INFO ON THE NW

Tom Eckman

Manager, Conservation Resources

Northwest Power and Conservation Council

851 SW Sixth Avenue, Suite 1100

Portland, OR 97204

503.222.5161 Phone/503.803.5047 Cell

503.820.2370

TEckman@nwcouncil.org

17

THE NORTHEAST STORY

18

Total Ratepayer Funding ≈ \$595 million/year

New York State authorities \$240 million/year Massachusetts Utility programs \$136 million/year \$108 million/year New Jersey Public Utility Commission Connecticut Utility programs \$49 million/year Rhode Island Utility programs \$23 million/year New Hampshire Utility programs \$17 million/year Vermont Efficiency Utility \$14 million/year Public Utility Commission \$8 million/year PA & MD: Low income program funding only (non-SBC)

Market Transform = 25-75% of budgets

19 🔲

20 🔲

21

22 FOR MORE INFO ON THE NE

Sue Coakley
Executive Director
Northeast Energy Efficiency Partnerships
5 Militia Drive

Lexington, MA 02421 781.860.9177 ext. 12

scoakley@neep.org

23

THE MINNESOTA STORY

24 MN Conservation Improvement

- Conservation Improvement Plan (CIP) legislation requires utility investment in energy efficiency programs with State oversight into planning and evaluation.
 - Utilities are required to file Integrated Resource Plans with the state, which are used to determine investment levels.
 - Utilities are allowed to recovery CIP expenses through annual rate adjustments and recovery is based on a performance incentive.
- Electric utilities invest a minimum of 1.5% to 2% of their gross operating revenues
 - \$51.4 million in 2003
- Natural gas utilities invest a minimum 0.5% of their gross operating revenues
 - \$12.2 million in 2003

25 How have MN consumers done?

- 26 How have MN consumers done?
- 27 How have Xcel investors done?
- 28 How has the MN environment done?
- 29 FOR MORE INFO ON MN

Chris Davis

MN Department of Commerce

85 7th Place East, Suite 500 St. Paul, MN 55101 (651) 296-7130 christopher.davis@state.mn.us

30 WISCONSIN

- The state-administered "Focus on Energy" is a public benefits program funded by a fixed charge on customer bills.
- The utilities pay into a segregated account through the Wisconsin Department of Administration.
 - Electric utilities invested \$47.6 million in 2003
 - Natural gas utilities invested \$13.9 million in 2003
- Avg. energy savings per household = \$57.57/year
- Avg. energy savings per business = \$1,406.82/year

31 Wisconsin Achievements

- As of December, 2004 Wisconsin has:
 - Saved 646,870,937 kWh
 - Saved 29.918.558 Annual Therms

- Avoided emissions of
 - 3,986,350 pounds of NOx
 - 7,893,621 pounds of Sox
 - 1.8 billion pounds of CO2
 - 31.632 pounds of Mercury
- Created 1,774 full-time equivalent job years
- Benefit-Cost Ratio between 3 and 5.7 depending on inclusion of non-energy benefits

32 FOR MORE INFO ON WI

Barbara Smith

WI Department of Administration

101 E. Wilson Street, 6th Floor Madison, WI 53707 608.266.7554 barbara.smith@doa.state.wi.us

33 IOWA

- Regulated utilities are required to file energy efficiency plans with the Iowa Utilities Board
- Utilities are allowed cost recovery through an automatic adjustment mechanism.
 - Electric utilities invested \$40 million in 2004
 - Natural gas utilities invested \$20 million in 2004
- Contact Gordon Dunn at 515-281-7051 or gordon.dunn@iub.state.ia.us for more information
 - Savings data will be available after May 1st



BENEFITS OF ENERGY EFFICIENCY TO ILLINOIS

35 Energy Efficiency

Is the first, most basic step to:

ENERGY BENEFITS

- Avoid building more power plants
- Reduce current energy usage
- Help alleviate transmission and distribution issues

ENVIRO BENEFITS

- Thus... reducing the introduction of pollutants into the environment
- Create a more sustainable future

OTHER BENEFITS

- Create better-informed and more aware consumers
- Help revitalize the economy by investing in manufacturing of energy efficient products and energy efficient services

36 Long-term Efficiency Also Shapes Demand

37 🔲

38 FOR MORE INFO

Rich Sedano

Regulatory Assistance Project

50 State Street, Suite 3 Montpelier, VT 05602 802.223.8199 rapsedano@aol.com

39 Best Program Practices for the Residential, Commercial and Industrial Sectors

40 Program Overview

Successful Programs have common elements:

- Consistent funding over multiple years
 - Critical to the long-term success of efficiency programs
 - Provides stability and involvement in the marketplace
- Don't expect results immediately
 - Allows time to learning lessons, build infrastructure, and engage in relationships with vendors, suppliers, and others in the marketplace
- Reasonable flexibility for utilities and the state to meet the goals set
- Strong connections to the relevant marketplace
- Effective and unbiased evaluation

41 Residential Product Programs

- Suite of ENERGY STAR® Qualified Products
 - Lighting, Appliances, Room AC, HVAC systems
 - Consumer Incentives
 - Retailer and Manufacturer participation and leverage
 - Consumer and retailer outreach and education
 - Include recycling of old products (refrigerators and room ACs)
 - View as an entire suite of programs when addressing cost-effectiveness
 - Use ENERGY STAR as a common platform for all products

• Central HVAC Training

- Federal standard will become SEER 13 in 2006
- Need for proper sizing and installation of central AC systems
- Verification of proper installation is critical to accurately assess program effectiveness

⁴² Residential Homes Programs

- Homes Programs
 - New Homes: Build to meet ENERGY STAR Homes specification or above
 - Builder/developer and homeowner education and incentives; increased incentives for percentages above ENERGY STAR
 - Allow time to build infrastructure and market
 - · Should also include incentives or components for 'plug' loads
 - Existing Homes
 - Home Performance with ENERGY STAR Program
 - Contractor training on system approaches to improve existing home efficiency and marketing tools

- · Whole home audits
- · Financing and incentives for homeowners to follow-through with measures
- Quality Assurance (QA)/Quality Control (QC) on contractors

43 🔲 Commercial/Industrial Programs

- New Construction
 - Design Assistance
 - · Recommend a hybrid approach that includes consultation as well as incentives to cover partial incremental costs of upgrades
- Small Business
 - The sector is defined by monthly demand (kW) or annual energy use (kWh)
 - Target specific technologies: lighting, water heater, HVAC, refrigeration, motors
 - · Program sponsor should fund majority of improvement costs and offer low to no-interest financing for remaining expenses
 - · Outside of the utility key account reps, sponsor should market via direct mail and telemarketing
- Lighting
 - Incentives for CFLs, Fluorescents, LEDs, fixtures and controls
 - Financing

44 Commercial/Industrial Programs Cont.

- HVAC
 - Focus on high efficiency units for replacement and new applications mainly rooftop units
 - HVAC contractor training, support and education
 - Customer awareness and incentives
 - Use traditional key account rep and other utility marketing
- Standard Offer Programs
 - Performance contracting with incentives for ESCOs
 - Should include M&V component
 - Incentives may be based on what measures get installed with higher incentive values for smaller customers
 - Payback and other criteria can be specified

45 ■ What are we NOT talking about?

- Curtailment
- Load Shifting/Shedding
- Other tools that a utility uses to manage service territory load

46 Program Evaluation

- Is essential for all program activities
- Should be conducted by a third-party evaluation expert
 - (not the administering or implementing entity)
- Achieve greater evaluation cost savings, extrapolation of meaningful data and results through coordination of evaluation activities among similar programs
 - (i.e. do it state-wide and not on a utility service territory by utility service territory basis)
- Should allocate approximately 5% of total program investments to cover independent evaluations

47 How Might Energy Efficiency Administration be Structured?

- · Administration of collection and distribution of funds
 - This fiscal agent role should reside with the ICC
- Administration of guidelines/criteria for qualifying programs
 - This important role should reside with the ICC
- Administration of qualifying programs
 - May reside with Utilities and/or DCEO (depending)
- Administration of measurement, verification & evaluation
 - This should NOT reside with program administrator or subcontractors

May reside with ICC, DCEO, or a third party or in a shared fashion between ICC and DCEO except where DCEO is the program administrator

⁴⁸ Contact Information

Alecia Ward, Executive Director

award@mwalliance.org

Midwest Energy Efficiency Alliance (MEEA)

PHONE: (312) 587-8390 x 15 WEBSITE: www.mwalliance.org